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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,994	06/15/2001	Gabrie Hoogland	GEPL.P-067	9843

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EXAMINER	
MUSSER, BARBARA J	
ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

A2

Office Action Summary	Application No.	Applicant(s)	
	09/882,994	HOOGLAND ET AL.	
	Examiner	Art Unit	
	Barbara J. Musser	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 January 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18,20-22 and 24-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18,20-22 and 24-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-18, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacGregor et al. in view of Maresca et al.(U.S. Patent 4,788,249)

MacGregor et al. discloses forming an article by placing a cyclo-aliphatic polyester substrate in a film form in a mold and injection molding behind it.(Col. 1, ll. 25-30, 56-58) The substrate is a mixture of cyclo-aliphatic polyester and polycarbonate which can contain colorants and stabilizers.(Col. 6, ll. 52-61) The substrate placed in the mold id in the form of a film. The reference does not disclose the substrate containing an impact modifier but does disclose the injection molded material can contain an impact modifier.(Col. 9, ll. 56-66) Impact modifiers provide the resins with excellent impact resistance and stiffness.(Col. 9, ll. 64-65) Maresca et al. discloses it is known to include impact modifiers as well as stabilizers and pigments(Col. 13, ll. 7-10) in compositions containing cycloaliphatic polyesters which are used as films.(Col. 2, ll. 59-65; Col. 13, ll. 17-20; Col. 16, ll. 11) It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an impact modifier in the films of MacGregor et al. which were used as substrates in the mold since this would increase the impact strength of the substrate which would hit the surface first when

falling, particularly since Maresca et al. discloses it is known to include impact modifiers in films containing cycloaliphatic polyesters.(Col. 15, ll. 65- Col. 16, ll. 11) Since MacGregor et al. discloses the final articles can be transparent(Col. 1, ll. 48), one in the art would understand that all the layers would be transparent.

Regarding claim 3, the substrate can be PCCD and thus would consist essentially of cyclo-aliphatic diols and diacids.(Col. 4, ll. 66-67)

Regarding claim 4, the substrate can be cyclo-aliphatic polyester(Col. 1, ll. 57) and the substrate can be 99.94% resin indicating the substrate can consist essentially of cyclo-aliphatic polyester.

Regarding claims 5 and 6, the substrate can be 1-99 parts polycarbonate.(Col. 9, ll. 60-63)

Regarding claim 7, the polycarbonate can be bisphenol-A.(Col. 2, ll. 60)

Regarding claims 8 and 9, the substrate can be 5 mils thick.(Col. 10, ll. 51-54)

Regarding claim 10, the cyclo-aliphatic polyester can be PCCD and the polycarbonate can be BPA.(Col. 5, ll. 24-32)

Regarding claim 11, the substrate has a transparency of greater than 87%.(Col. 10, ll. 29)

Regarding claim 12, MacGregor et al. does not disclose the specifics of the glass transition temperature. However, both the reference and the claims are directed to the same material, namely a mixture of polycarbonate and PCCD and would therefore have glass transition temperatures in the same range as such naturally flows from the materials.

Regarding claim 13, the substrate can be 1-99 parts polyester.(Col. 9, ll. 58-63)

Regarding claim 14, Maresca et al. discloses the impact modifier can be 5-25% of the film composition.(Col. 16, ll. 5) It would have been obvious to one of ordinary skill in the art at the time the invention was made to pick anywhere within the desired range.

Regarding claim 15, since the substrate is intended to be transparent, one in the art would appreciate that the materials added to it would be transparent as well to preserve the required transparency of the final substrate.

Regarding claim 17, one in the art would appreciate that the impact modifier would necessarily have approximately the same refractive index as the polymer composition since otherwise it would reduce the transparency of the substrate. As the reference is using the same materials as applicant, one in the art would appreciate that intrinsically the refractive index of the polymer compositions would be the same.

Regarding claim 18, MacGregor et al. discloses the impact modifier can be ABS.(Col. 10, ll. 6)

Regarding claim 19, MacGregor et al. discloses the polymer composition can be opaque.(Col. 1, ll. 48-50) All opaque materials have a color.

Regarding claims 20 and 21, the substrate can have a decorative area printed on it. Since this decorative area is between the substrate and the base, it would be effectively transferred to the base.(Col. 10, ll. 52-55)

3. Claims 22, 24, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacGregor et al. and Maresca et al. as applied to claim 21 above, and further in view of the admitted prior art.

MacGregor et al. does not disclose removing the substrate from the base after injection molding the base against the substrate but it does disclose "in-mold decoration"(Col. 1, ll. 25-27). The admitted prior art discloses that in mold decoration can involve two types of processes. In one process the film is a permanent part of the final product and in the other, the film acts as a temporary carrier for the decoration.(Pg. 1, ll. 15-20) It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the product of MacGregor et al. by either in-mold decoration process as both are clearly well-known and conventional in-mold decoration processes.

Regarding claim 24, since the reference is using the same materials as applicant, the design would be transferred at the same time, i.e. during formation.

Regarding claims 26 and 27, MacGregor et al. discloses the polyester can be PCCD.(Col. 5, ll. 24-32)

Regarding claim 28, MacGregor et al. discloses the base can be polycarbonate.(Col. 11, ll. 43-50)

Response to Arguments

4. Applicant's arguments filed 1/26/04 have been fully considered but they are not persuasive.

5. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, MacGregor et al. discloses that impact modifiers provide the resins with excellent impact resistance and stiffness.(Col. 9, ll. 64-65) Maresca et al. discloses it is known to include impact modifiers (Col. 13, ll. 7-10) in compositions containing cycloaliphatic polyesters which are used as films.(Col. 2, ll. 59-65; Col. 13, ll. 17-20; Col. 16, ll. 11) The substrates placed in the molds of MacGregor et al. are in the form of films. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an impact modifier in the substrate since this would increase the impact strength of the substrate which would hit the surface first when falling, particularly since Maresca et al. discloses it is known to include impact modifiers in films containing cycloaliphatic polyesters.(Col. 15, ll. 65- Col. 16, ll. 11)

Regarding applicant's argument that the impact modifier of Maresca would render the film of MacGregor et al. opaque, one in the art reading the references as a whole would appreciate that when a transparent product was desired, an impact modifier which was also transparent would be used. Examiner is not suggesting using the specific impact modifiers of Maresca, which applicant has not shown renders cyclo-aliphatic polyesters opaque, in MacGregor et al., but rather that Maresca suggests the use of impact modifiers in the film substrate of MacGregor et al., and that one in the art would know how to pick the impact modifier such that the film would remain transparent

when a transparent product was desired. It is noted that applicant uses acrylate elastomers and MacGregor et al. discloses the impact modifiers can be acrylate rubbers. As MacGregor et al. desired a transparent final product, the reference clearly selected an impact modifier which would provide this transparency. Certainly such is within the skill level of the ordinary artisan.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Barbara J. Musser** whose telephone number is (571) **272**-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJM

JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300